## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (original) A tufting machine for forming tufts of yarns in a backing material passing therethrough, comprising:

at least one needle bar having a series of spaced needles positioned therealong; a yarn feed unit comprising:

- a plurality of yarn feed devices each including a drive motor and a drive roll for feeding a supply of yarns to said needles along said needle bar;
- a plurality of yarn feed controllers electrically connected to said drive motors of said yarn feed devices for controlling the feeding of the yarns to said needles;
- a yarn distribution device including at least one tube bank section through which the yarns are passed to said needles; and
- a control system in communication with said yarn feed controllers of said yarn feed unit for providing control signals based on programmed pattern information to said yarn feed controllers.

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2. (original) The tufting machine of claim 1 and wherein said yarn feed unit comprises a

self-contained attachment having a predetermined number of yarn feed devices and

adapted to be releasably mountable on the tufting machine.

3. (original) The tufting machine of claim 1 and further comprising a series of yarn feed

units mounted across the tufting machine and each supplying a series of yarns to a

selected group of needles.

4. (original) The tufting machine of claim 1 and wherein said yarn feed distribution device

includes at least two separate tube bank sections and each of said yarn feed devices feeds

at least two yarns to said needles.

(original) The tufting machine of claim 4 and wherein said tube bank sections are

scrambled.

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6. (original) The tufting machine of claim 1 and wherein each of said yarn feed controllers

includes a control processor in communication with said control system, and a series of

motor controllers that communicate with and control operation of said drive motors of

said yarn feed devices.

7. (original) The tufting machine of claim 1 and wherein said yarn feed controllers each

comprise a circuit board having a control processor and a series of motor controllers,

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each in communication with said control processors and with at least one of said drive

motors of said yarn feed devices for controlling the feeding of the yarns by said drive

motors.

8. (currently amended) The tufting machine of claim 1 and wherein said control system

includes a yarn feed unit system controller running multiple networks at least one

network over which said yarn feed controllers receive instructions from and communicate

with said system controller.

9. (currently amended) The tufting machine of claim 1 and further comprising a housing

having a pair of opposed sidewalls and a series of mounting plates for mounting said yarn

feed devices within said housing.

10. (original) The tufting machine of claim 1 and wherein each of said yarn feed drive units

further includes a drive roll and an idler roll between which a yarn is engaged and drawn

for feeding to a needle.

11. (original) The tufting machine of claim 10 and wherein said drive roll of each yarn feed

unit includes a gripping surface.

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12. (currently amended) The tufting machine of claim 1 and wherein said yarn feed devices

each further include at least one yarn guide for feeding the yarn between to a drive roll

and an idler roll.

13. (original) The tufting machine of claim 1 and further comprising a design center

computer in communication with said system controller.

14. (original) The tufting machine of claim 1 and wherein said control system includes a

system controller for said yarn feed unit, wherein said system controller of said yarn feed

unit is in communication with a machine controller that includes a design center

component.

15. (original) The tufting machine of claim 1 and wherein said control system comprises a

tufting machine controller for controlling operation of the tufting machine and said drive

motors of said yarn feed unit according to programmed pattern instructions.

16. (original) A method of assembling a tufting machine having a frame and at least one

reciprocable needle bar having a series of spaced needles mounted therealong and

carrying a series of yarns for forming tufts of yarn in a backing material passing beneath

the needles, comprising:

mounting at least one yarn feed unit on the frame of the tufting machine, the yarn

feed unit having a predetermined number of yarn feed devices mounted

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therein for feeding a series of yarns to the needles, yarn feed controllers

controlling the yarn feed devices, and a yarn feed distribution device;

connecting the yarn feed controllers to a system controller for controlling the

feeding of the yarns to the needles by each of the yarn feed devices; and

threading the yarns from a desired number of the yarn feed devices through the

varn feed distribution device to each of the needles.

17. (original) The method of claim 16 and further comprising selecting one or more

standardized, self-contained yarn feed attachments each having a predetermined number

of yarn feed devices.

18. (original) The method of claim 16 and wherein connecting the yarn feed controllers to a

system controller comprises establishing at least one network connection between the

system controller and the yarn feed controllers.

19. (original) The method of claim 18 and wherein establishing at least one network

connection between the yarn feed controllers and the system controller comprises

providing the system controller with a series of network cards and connecting at least one

network card to the yarn feed controllers to establish a first network channel and

connecting another of the network cards to at least some of the yarn feed controllers to

establish a second network channel.

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20. (original) The method of claim 18 and wherein establishing at least one network

connection between the yarn feed controllers and the system controller comprises running

multiple networks on at least one network channel.

21. (currently amended) the The method of claim 16 and wherein threading the yarns from

the yarn feed devices comprises feeding multiple yarns from each yarn feed device with

each yarn fed through separate yarn feed tubes of the yarn feed distribution device to

selected needles.

22. (original) A tufting machine for forming tufts of yarns in a backing material, comprising:

a needle bar having a series of needles spaced therealong;

a yarn feed unit mounted on the tufting machine and including a series of yarn

feed devices for feeding the yarns to the needles;

a yarn feed tube bank constructed and arranged to guide the yarns to various ones

of the needles and having at least two separate tube bank sections

receiving yarns from the yarn feed devices of the yarn feed unit; and

a control system for controlling operation of the yarn feed devices based on

programmed pattern information.

23. (original) The tufting machine of claim 22 and wherein said yarn feed unit comprises a

self-contained attachment having a predetermined number of yarn feed devices and

adapted to be releasably mountable on the tufting machine.

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24. (original) The tufting machine of claim 22 and wherein said tube bank sections are

scrambled.

25. (currently amended) The tufting machine of claim 22 wherein each of said yarn feed

devices feeds at least two yarns each through separate tubes of said tube bank sections to

said needles.

26. (original) The tufting machine of claim 22 and wherein said yarn feed unit further

comprises a plurality of yarn feed controllers in communication with said control system

for controlling said yarn feed devices.

27. (original) The tufting machine of claim 22 and wherein said yarn feed controllers each

comprise a circuit board having a control processor and a series of motor controllers,

each in communication with said control processor and with at least one of said drive

motors of said yarn feed devices for controlling the feeding of the yarns by said yarn feed

devices.

28. (currently amended) The tufting machine of claim 22 and wherein said control system

includes yarn feed unit system controller running multiple networks at least one network

over which said yarn feed controllers receive instructions from and communicate with

said system controller.

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29. (currently amended) The tufting machine of claim 22 and further comprising a housing

having a pair of opposed sidewalls, a unit mounting plate adapted to mount said housing

on the tufting machine, and a series of mounting plates for mounting said yarn feed

devices within said housing.

30. (original) The tufting machine of claim 22 and wherein said control system includes a

system controller for said yarn feed unit, wherein said system controller of said yarn feed

unit is in communication with a machine controller that includes a design center

component.

31. (original) A yarn feed unit for controlling the feeding of individual yarns to a series of

spaced needles in a tufting machine for forming a series of tufts of yarn in a backing

material, said yarn feed unit comprising:

a plurality of yarn feed devices each including a drive motor driving a drive roll

for engaging and feeding selected ones of the yarns to one of the needles;

and

a yarn feed controller communicating with and controlling operation of said drive

motors of said yarn feed devices for controlling the feeding of the yarns in

response to programmed pattern instructions; and

a yarn feed distribution device having a series of yarn feed tubes arranged in

separate tube bank sections each receiving one of the yarns from said yarn

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feed devices for guiding the yarns to selected needles of the tufting

machine.

32. (original) The yarn feed unit of claim 31 and wherein said yarn feed unit is manufactured

as a self-contained attachment having a predetermined number of yarn feed devices and is

releasably mountable to the tufting machine.

33. (currently amended) The tufting machine yarn feed unit of claim 31 wherein each of said

yarn feed devices feeds at least two yarns each through separate tubes of said tube bank

sections to said needles.

34. (currently amended) The tufting machine yarn feed unit of claim 31 and wherein said yarn

feed controllers each comprise controller comprises a circuit board having a control

processor and a series of motor controllers, each in communication with said control

processors processor and with at least one of said drive motors of said yarn feed devices

for controlling the feeding of the yarns by said drive motors.

35. (currently amended) The tufting machine yarn feed unit of claim 31 and wherein said yarn

feed unit comprises a self-contained attachment having a series of mounting plates in

which a predetermined number of yarn feed devices are received and adapted to be

releasably mounted on the tufting machine.

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36. (currently amended) The tufting machine yarn feed unit of claim 31 and wherein said

control system includes yarn feed unit further comprising a system controller running

multiple networks at least one network over which said yarn feed controllers receive

controller receives instructions from and communicates communicates with said system

controller.

37. (currently amended) The tufting machine yarn feed unit of claim 31 and wherein said tube

bank sections are scrambled.

38. (currently amended) The tufting machine yarn feed unit of claim 31 and wherein said

control system includes a system controller for said yarn feed unit, wherein said system

varn feed controller of said the yarn feed unit is in communication with a machine

controller that includes a design center component.

39. (new) The yarn feed unit of claim 31 and wherein said yarn feed controller comprises a

series of drives for said drive motors, each of said drives controlling one or more of said

drive motors.

40. (new) A tufting machine for introducing tufts of yarns into a backing material,

comprising:

a needle bar having a series of space needles;

at least one yarn feed unit comprising:

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a series of yarn feed devices for feeding yarns to the needles;

a yarn distribution device having at least one tube bank section through

which the yarns are directed to selected needles; and

a control system in communication with the yarn feed devices to provide

instructions for controlling the yarn feed devices in accordance

with programmed pattern information.

41. (new) The tufting machine of claim 40 and wherein the at least one yarn feed unit further

comprises a series of yarn feed controllers controlling at least one of the yarn feed

devices.

42. (new) The tufting machine of claim 40 and wherein the at least one yarn feed unit further

comprises a series of yarn feed controllers each controlling two or more of the yarn feed

devices.

43. (new) The tufting machine of claim 40 and wherein the at least one yarn feed unit

comprises a system controller in communication with the yarn feed devices and running

at least one network over which instructions are sent to the yarn feed devices.

(new) The tufting machine of claim 40 and wherein said tube bank sections are

scrambled.

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45. (new) The tufting machine of claim 40 wherein each of said yarn feed devices feeds at least two yarns each through separate tubes of said tube bank sections to said needles.

- 46. (new) The tufting machine of claim 40 and wherein said control system includes a design center component.
- 47. (new) The tufting machine of claim 40 and wherein each yarn feed device comprises a drive motor and a drive roll driven by the drive motor to feed the yarns.